

Field report

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To make a long story short, my stay at the University of California, San Francisco was one of the best, if not the absolute best, experience I have had during my studies so far. Therefore I am immensely grateful for the support given to me by the Austrian Marshall Plan foundation, without which I would not have been able to go to San Francisco. It is an experience I strongly encourage everyone to consider, even if it seems daunting at first.

I was thrilled to hear that my application for the Austrian Marshall Plan Foundation Scholarship had been accepted. The most difficult part after that was to compile the documentation necessary for my J1 visa application. However, the administrative staff of UCSF and my host lab were very helpful in completing my application and I was impressed by the swiftness and professionalism with which all issues were handled and eventually resolved. Still, the application process took several months and I strongly advise everyone planning a stay in the US to plan for at least six months to complete visa formalities.

UCSF is one of the biggest and most important research institutions in the world, and it was incredible to be a part of it even for a short time. Not only the research conducted in the Hebrok lab, where I completed my research stay, is world class, but the whole institution. This provides an extremely enriching environment for scientific research, and a lot of opportunities to broaden one's horizon and get new insights and ideas for their own project. Being able to attend talks by and interact with scientists who usually you only know from their publications not only helps to further the understanding of their research, but it also provides insights in how top level science is performed. Regarding that, it was very interesting to attend the regular lab meetings of the group and to see how questions and issues coming up in scientific research are tackled, from discussions about mundane issues in the lab to preparation of publications and grants and how the daily research fits into the bigger picture. It was refreshing to be part of a group where everyone seemed to be invested not only in their own projects, but also being able to provide helpful advice to other group members, evidenced by

lively discussions during lab meetings and beyond. I am also glad and grateful how well I was received in the research group, with all people always happy to take time out of their very busy schedules to answer my questions and provide guidance.

Regarding my own project, progress was hampered by technical issues, as is common when working with biological systems, so unfortunately I could not perform all the planned experiments. The cell lines I intended to study did not behave as expected during the in vitro differentiation protocol. However, I was able to learn how to perform the very nuanced differentiation protocol and being taught by the people who established it was invaluable in getting all the small, but crucial details right. All the people in the lab were also very helpful in providing me with tips and approaches to successfully perform the differentiation with our own cell lines back in Innsbruck. All this knowledge allowed me to successfully establish the protocol at my home institution, something that would have not been possible without my first hand experience.

Besides the benefits my research stay provided me as a scientist, the cultural aspect of my stay abroad was also a hugely beneficial experience. Really living in a bustling and diverse metropole like San Francisco is an experience that will accompany me forever. I was surprised by how accessible and welcoming San Francisco and its inhabitants were towards me. After the initial sticker shock - cost of living in San Francisco is indeed very high - navigating the city was a lot easier than I imagined and it had so many things to experience. There are so many sights to see and so many different neighbourhoods with a multitude of cultural influences from all over the world, that years would probably not suffice to get a complete picture of them. Another highlight was to get a glimpse of international companies like Twitter, Genentech and so on, which all are very present in the real world San Francisco, along with the famous startup culture of the Bay Area. I also made multiple visits to Indie Bio, the well known incubator for small startups from the biotech sector. It was interesting to see the combination of boundless creativity, science and entrepreneurial spirit give rise to companies trying to solve important problems from the personal to the global scale and how an idea evolves to become a business, with all the challenges that come along. Connecting to the people actually involved in these companies provided a lot more insight than simply browsing through a company website and also gave me important insights in the practical aspects of how to start and run an early stage company.